Rivers and Streams

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Walleye Telemetry on the Upper Mississippi River

Radio telemetry studies on habitat selection and spawning movements of adult walleye have found that the greatest amount of movement occurs during late winter and early spring periods when fish are moving to spawning areas. Annual movements of twenty to forty-five miles are common as adult fish move from winter habitats to spawning habitats and shortly thereafter return to summer areas. Adult walleye are basically homebodies and can be found within a mile radius until spawning time. In some years, females tend to move into side channel and backwater lake habitats for 2-3 weeks prior to the spawning period. Water temperatures in these areas are 4-8 degrees warmer than those in the main channel. We believe mature females use these areas to aid egg maturation prior to actual spawning act. Three spawning areas have been documented in Pool 13, one in Pool 11 and one in Pool 9; all have characteristic rock-rubble, gravel, or mussel bed substrates. We have also been working with the Rock Island District Corps of Engineers with monitoring of radio-tagged fish during the winter period to document any changes in winter habitat that may result from changes in wingdam and closing dam construction in mid to lower Pool 13. Preliminary results show that walleye use these new structures throughout the year except during spawning.

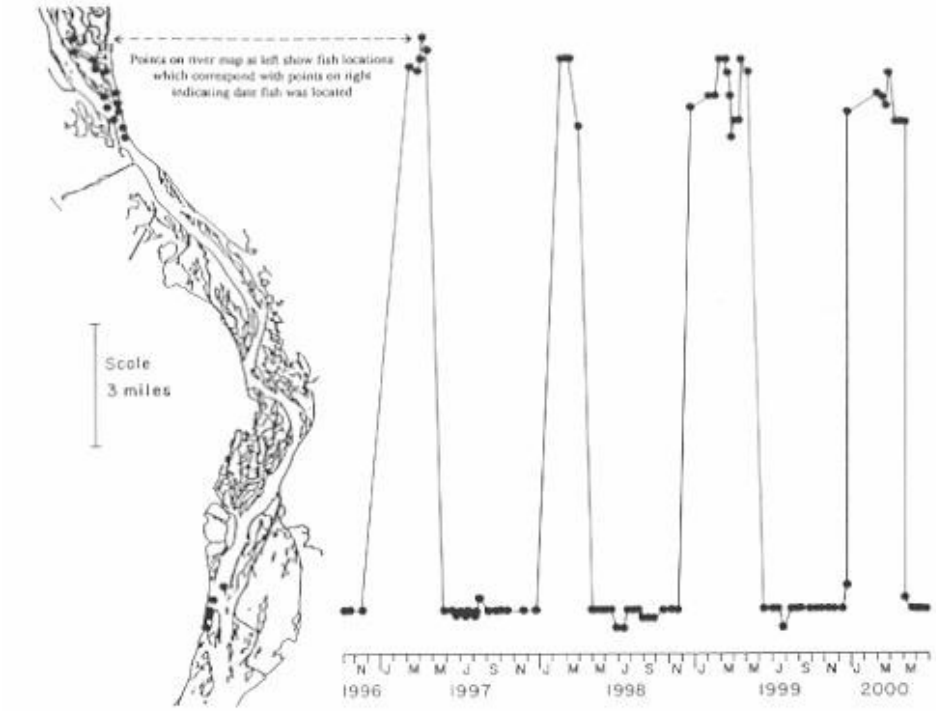

Figure 7. Locations for radio tagged walleye 49 600 in Pool 13, Upper Mississippi River